DOCUMENT RESUME

ED 204 069 RC 012 782

AUTHOR Beck, Ann E.
TITLE Hawaii Bound School Safety and Accident Report 1979.
INSTITUTION Hawaii Bound School, Inc., Honolulu.
PUB DATE 79
NOTE 15p.: For a related document, see RC 012 783.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Accident Prevention; Accidents; Adolescents; Case Studies; Data Collection; First Aid; *Injuries; *Outdoor Activities; *Outdoor Education; *Safety Education; Sanitation; Secondary Education
IDENTIFIERS *Hawaii Bound School

ABSTRACT

An analysis of the accident experience of the Hawaii Bound School for 1979 is given in this report. Student and instructor accident reports list all injuries reported during the year, the number of times each type of injury was reported and the age range of students injured. The report recommends two additional safety rules, four additional sanitation procedures, and several items on safety specialists, number of instructors per course and instructor training. The Near Miss Report describes eight incidents which could have resulted in injuries, the contributing factors present in each case, and possible preventative measures. The analysis includes the following observations: (1) the number of accidents increases as the summer season progresses; (2) there is no significant difference between the number of accidents reported by 12-15 year old participants and those 16 years old and older; (3) minor lacerations is the category with the greatest number of injuries reported; and (4) the accident rate for instructors is higher than for students. Tabulations of number of student and instructor days in the school and accident rate per student day by type and year are included. (CM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HAWAII BOUND

ED204069

JAN 1981
ERIC/CRESS
RECEIVED

HAWAII BOUND SCHOOL
SAFETY AND ACCIDENT REPORT 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ann E. Beck

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

RC 012782

submitted by:

Ann E. Beck
Program Director
Hawaii Bound School

OVERVIEW

As a part of our Safety Program, the following is an analysis of our accident experience during 1979.

DATA COLLECTION

Data is collected by field instructors as accidents and injuries occur and is relayed to the Program Director on field accident report forms. (See Attached) Each accident is counted once although several cards may have been submitted to describe the injury, treatment and care (i.e. a cut that becomes infected over a weeks period) All injuries are reported, from a minor scrape to a broken bone.

DEFINITIONS

On the attached sheets, the # symbol refers to the number of accidents. The "rate" term is the number of accidents per student day. The rate is computed as follows:

$$\frac{\text{number of accidents}}{\text{number of student days}} = \text{accident rate per student day}$$

OBSERVATIONS

1. The number of accidents increases as the summer season progresses.

2. There is no significant difference between the number of accidents reported by 12-15 year old participants and those 16 years and older.

3. The highest number of injuries reported occur in the category minor lacerations.

4. The accident rate for instructors is higher than that of students.

RECOMMENDATIONS

1. The following safety rules have been added to the program in response to the accidents reported.

   a. Tennis shoes or tabis will be worn when launching and landing the canoes.
   b. A stainless steel knife will be included in the ocean emergency equipment and carried in the canoes at all times.

2. The following are additional sanitation procedures included to help protect against illness and infection.

   a. Water purification kits will be carried outside of Hawaii Volcanos National Park and used at instructors discretion.
   b. When resources are available, all eating utensils should be boiled.
   c. Before handling food, hands should be washed with antiseptic soap and a nail brush which is provided in the commissary
   d. Antiseptic soap solution will be posted at the latrine at each campsite.

RECOMMENDATIONS CONTD.

3. In an effort to counteract the rise in accidents during the summer, a refresher course will be given between courses for instructors providing them with an opportunity to share their safety and accident related experiences.

* 4. Instructor training will be held for two weeks prior to the first summer session, and will focus on first aid and emergency care in the wilderness and search and rescue. The training session will be conducted as a certification program, and will result in the certification of Hawaii Bound Instructors.

5. Independent safety specialists will be brought in to monitor the safety program mid-way through the summer season.

6. A three month instructor training program is being initiated to train interested people in all of the aspects of the program with special focus on safety and first aid.

7. There will be two instructors on all standard and junior courses at all times. Whenever possible, there will be two instructors on short courses.

STUDENT DAYS 1979

STUDENT DAYS

24 Day Standard Course	86 X 24 = 2064
24 Day Junior Course	86 X 24 = 2064
15 Day Adult Course	9 X 15 = 135
4 Day Adult Course	14 X 4 = 56
Total Student Days	4319

STUDENT DAYS PER MONTH	JUNE	JULY	AUGUST	SEPT.
24 Day Standard Course	912	480	672	0
24 Day Junior Course	504	1320	240	0
15 Day Adult Course	0	0	0	135
4 Day Adult Course	56	0	0	0
Total Monthly Student Days	1472	1800	912	135

INSTRUCTOR DAYS PER MONTH	JUNE	JULY	AUGUST	SEPT.
24 Day Standard Course	168	48	120	0
24 Day Junior Course	96	240	48	0
15 Day Adult Course	0	0	0	30
4 Day Adult Course	12	0	0	0
Total Monthly Instructor Days	276	288	168	3[illegible]

TOTAL INSTRUCTOR DAYS 762

Student Accident Report 1979

	June 1979		July 1979		August 1979		Sept. 1979		Total		Average
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	# per month
Hypothermia, Hyperthermia Severe Exhaustion, Allergic Reactions, Altitude Sickness	6	.004	9	.005	3	.003			18	.004	4.5
Fractures & Dislocations	1	.0006					1	.007	2	.00046	.5
Lacerations & Punctures	8	.006	11	.006	11	.012	3	.022	32	.007	8.0
Sprains & Strains	4	.003	2	.001	2	.002			8	.002	2.0
Contusions & Abrasions	9	.006	5	.003	9	.010			23	.005	5.75
Burns & Stings	3	.002	4	.002	10	.010			17	.004	4.25
Water Related Cuts	3	.002	3	.002	14	.015	1	.007	21	.006	5.25
Total	34	.023	34	.018	49	.054	5	.037	122	.028	30.5
Student Days	1472		1800		912		135		4319		
The following is a breakdown of accidents reported involving people 12-15 years of age and 16 years and above.											
12 - 15 years	11	.022	29	.022	19	.079	0	0	59	.0285	14.75
16 years and above	23	.024	5	.010	30	.046	5	.037	63	.028	15.75

The above report includes every report made for all degrees of injury. There is no separation of severity, such as accidents requiring medical attention, evacuation, or removal from a course.

The following is a report of illnesses and injury reported that are not included in the categories listed above.

Blisters	2	.001	2	.001	9	.010	0	0	13	.003	3.25
Illness	5	.003	13	.007	3	.003	1	.007	22	.005	5.50

See the attached Near Miss Report for information regarding potential accidents.

BEST COPY AVAILABLE

Instructor Accident Report - 1979

Type of Injury	June 1979 #	June 1979 Rate	July 1979 #	July 1979 Rate	August 1979 #	August 1979 Rate	Sept. 1979 #	Sept. 1979 Rate	Total #	Total Rate	Average # per month
Hypothermia, Hyperthermia Severe Exhaustion, Allergic Reactions, Altitude Sickness	1	.004							1	.001	.25
Fractures & Dislocations											
Lacerations & Punctures	2	.007	2	.007	5	.036			9	.012	2.25
Sprains & Strains	3	.010			1	.006			4	.005	1
Contusions & Abrasions	3	.010			4	.012			7	.009	1.75
Burns & Stings											
Water Related Cuts			2	.007	2	.012			4	.005	1
Total	9	.032	4	.014	11	.065			25	.031	6.25
Instructor Days	276		288		168		30		762		

The above report includes every report made for all degrees of injury. There is no separation of severity, such as accidents requiring medical attention, evacuation, or removal from a course.

The following is a report of illnesses and injury reported that are not included in the categories listed above.

Blisters	1	.004			1	.006			2	.003	.5
Illness	2	.007	4	.014	2	.012			8	.010	2.0

BEST COPY AVAILABLE

HAWAII BOUND

NEAR MISS REPORT
JUNE -- SEPTEMBER, 1979

1. June 12, 1979 - Student got a cramp in his leg while night diving in the ocean from a canoe. All participants were using the buddy system. The student reported his cramp to the instructor who then transported the student back to the canoe using the cross-chest carry.

   Contributing Factors:

   Preventative Measures:

2. July 6, 1979 - A student became ill following his return home from Hawaii Bound. He was taken to the hospital where tests showed a staph infection in his kidneys. During the course, the student was treated for an infected coral cut on his foot by his instructors. The student did not complain of further pain or discomfort. Hospitalization period lasted 3 weeks.

   Contributing Factors:

   Preventative Measures: Have a daily period for tending to all cuts and scrapes, and for inspecting people for unreported cases. By involving the entire group, it may be easier for students to take responsibility for themselves and one another.

3. July 22, 1979 - While on solo, high winds came up and blew over some dead trees, nearly hitting one of the students on solo.

   Contributing Factors: There had been a fire in the area at the first of that month, damaging and killing many acres of trees.

   Preventative Measures: Before putting students out on solo, check the trees in the area, and find out from the park service, forestry dept., private land owner, etc. any information they may have which will influence the safety of the group.

4. July 24, 1979 - While crossing an old swinging bridge that crosses a stream, an instructor slipped and fell through loose boards with one leg. He managed to stop his fall by hanging on to guide wires.

   Contributing Factors: Old, slippery, rotten boards on bridge. Judgement.

   Preventative Measures: The bridge has been made impassable. All groups now use the nearby stream crossing until such a time when the bridge can be repaired.

cont'd. - Near Miss Report

5. August 3, 1979 - Approximately 6 students were left behind at a cabin unattended while the instructor took the rest of the group on a day hike. A couple of the students forced one of the others againt the cabin wall and threw knives around his head, just like in the movies.

   Contributing Factors: The two students who were throwing the knives had had trouble with the courts prior to this experience. They were minority, pre-delinquent youth and were in a group of all upper middle class youth. The different cultures in Hawaii have a history of fighting and mis-understanding. There was only one instructor for this segment of the course. Instead of requiring everyone to take part in the days activities, he allowed the group to split and half of them to remain behind unattended.

   Preventative Measures: Always have two instructors with each group of students.

6. August 4, 1979 - While diving down to check the sand anchor, the instructor almost got tangled in the anchor line.

   Contributing Factors:

   Preventative Measures: Always carry a knife at easy access in the canoe. When the anchorline is being checked, make sure that the buddy system is in use.

7. August 14, 1979 - During a time of extreme fire hazard in the desert, a student burned his toilet paper after going to the bathroom and inadvertently set the area of fire. The wind picked up the flame and burned an area 60 ft. square. The group put out the fire with a bucket brigade.

   Contributing Factors: High wind, extreme dryness. Despite the fact that the instructors had told the group not to burn their toilet paper or to set any kind of fire, they left the matches with the toilet paper. An incongruent message was passed on to the student and created confusion for him.

   Preventative Measures: Don't put the matches in with the toilet paper when you don't want people to burn their toilet paper. Provide no cook meals in environments when the fire hazard is so extreme.

8. August 28, 1979 - A search and rescue was carried out by the group for a girl who ran away from the group because of a fight with a couple of other students. The group was camped at 11,000 ft. level of Mauna Loa. The search was unsuccessful and the search was called off because it was dark and they didn't want anyone else to get lost. The student, who had been hiding near the campsite, returned to the group a little later that evening.

   Contributing Factors: The girl was dressed in dark clothing, ran away after dark into an environment that is totally black lava. There was a fair amount of tension in the group which was rising as the girl refused to help prepare dinner and did not respond to the efforts of the leader for the day to encourage her to fultill her responsibility to the group. The rising tension was passed over by the instructors as a rather normal level of interpersonal conflict.

cont'd. - Near Miss Report

8. Preventative Measures: In intense environmental conditions, especially, don't allow any time to pass if someone walks off angry, and/or upset from the group. Take immediate action to determine the cause of the conflict, and feelings of the people involved.

HAWAII BOUND

ACCIDENT REPORT -1979-

OVERVIEW

As a part of our Safety Program, the following is an analysis of our accident experience during 1979. The accidents reported here are only those accidents which required evacuation, medical attention and/or removal from a course. A supplemental accident report accounts for all injuries reported including such things as minor cuts, rashes, and mild altitude sickness.

DATA COLLECTION

Data is collected by field instructors as accidents and injuries occur and is relayed to the Program Director on field accident report forms. (See Below) Each accident is counted once although several cards may have been submitted to describe the injury, treatment and care (i.e. a cut that becomes infected over a weeks period).

DEFINITIONS

On the attached sheets, the # symbol refers to the number of accidents. The "rate" term is the number of accidents per student day annualized The rate is computed as follows:

$$\frac{\text{number of accidents}}{\text{number of student days}} = \text{accident rate per student day}$$

ACCIDENT RATE PER STUDENT DAY BY TYPE AND YEAR

TYPE OF INJURY	1978 #	1978 Rate	1979 #	1979 Rate	1980 #	1980 Rate	1981 #	1981 Rate	1982 #	1982 Rate	Average Rate (5 years)
Hypothermia, Hyperthermia Severe Exhaustion, Allergic Reactions, Altitude Sickness	N/A	N/A	1	.0002	1	.0004					
Fractures & Disiocations	N/A	N/A	0	0	0	0					
Lacerations & Punctures	N/A	N/A	1	.0002	0	0					
Sprains & Strains	N/A	N/A	2	.0004	0	0					
Contusions & Abrasions	N/A	N/A	0	0	0	0					
Burns & Stings	N/A	N/A	2	.0004	0	0					
Water Related Cuts	N/A	N/A	0	0	0	0					
Fatalities	0	0	0	0	0	0					
Total	N/A	N/A	6	.001	1	.0004					
Student Days	3,358		4,319		2,691						